REPORT RESUMES

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ESTABLISHMENT OF AN OCCUPATIONAL RESEARCH AND DEVELOPMENT COORDINATING UNIT FOR THE STATE OF IOWA.

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AN OCCUPATIONAL RESEARCH AND DEVELOPMENT COORDINATING UNIT WAS ESTABLISHED, AND A FINAL REPORT WAS GIVEN OF ITS ACTIVITIES DURING AN 18-MONTH PERIOD. THE OBJECTIVES WERE TO COLLECT AND DISSEMINATE INFORMATION, STIMULATE AND ENCOURAGE RESEARCH, IDENTIFY POTENTIAL RESEARCH PROBLEMS, ESTABLISH AND MAINTAIN WORKING RELATIONSHIPS, PROVIDE SUPPORT FOR LINE PERSONNEL, PROMOTE VOCATIONAL AND TECHNICAL EDUCATION, COOPERATE WITH OTHER STATES, AND ASSIST IN (1) PROGRAM, FACILITIES, AND STAFF DEVELOPMENT, (2) INFORMATION SYSTEM DEVELOPMENT, AND (3) PROGRAM EVALUATION. PROGRESS REPORTS OF THE UNIT WERE ANALYZED, AND 47 ACTIVITIES WERE IDENTIFIED TO DETERMINE THOSE OBJECTIVES WHICH RECEIVED THE GREATEST FREQUENCIES OF ATTENTION. THEY WERE, IN ORDER, (1) PROVIDE SUPPORT FOR LINE PERSONNEL, (2) STIMULATE AND ENCOURAGE RESEARCH, AND (3) COLLECT AND DISSEMINATE INFORMATION. IN VIEW OF THE PROJECTED CONTINUATION AND THE STAFF SUPPORT FUNCTION OF THE UNIT, EVALUATIVE INFORMATION WAS ELICITED FROM ITS USERS. IT WAS FOUND THAT THE UNIT GAINED WIDE ACCEPTANCE AS A GROUP TO PERFORM MUCH NEEDED SERVICES IN THE DEVELOPMENT OF TECHNICAL AND VOCATIONAL EDUCATION. (GD)

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FINAL REPORT
Project No. 5-0111
Contract No. OE-5-85-121

ESTABLISHMENT OF AN OCCUPATIONAL RESEARCH AND DEVELOPMENT COORDINATING UNIT FOR THE STATE OF IOWA

January 1967

U.S. DEPARTMENT OF
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Project No. 5-0111
Contract No. OE-5-85-121

Kenneth M. Wold
Donald G. Green

January 1967

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I. INTRODUCTION AND BACKGROUND

This is the final report of activities during the eighteen month period, June 1, 1965 - November 30, 1966, related to Project No. 5-0111 entitled, "Establishment of an Occupational Research and Development Coordinating Unit for the State of Iowa." In keeping with the purpose of the project a Research Coordinating Unit (RCU) was established June 1, 1965, under the directorship of Dr. Trevor G. Howe, the project initiator. This project was funded under provisions of Section 4(c) of the Vocational Education Act of 1963. A proposal for the continuation of the project was approved and a contract negotiated for continued federal support through June 30, 1968.

The setting in which the Iowa RCU is operating is one of transition and growth. The annual value of industrial production in Iowa surpassed that of agriculture about 1955. In 1965 the value of industrial production was more than twice its four billion value in 1955, and was three times that of agricultural production in 1965.

Much of Iowa's industrial growth stems from the strong agricultural base it has developed. This agricultural base will continue to influence industrial and economic development for some time to come, and must be maintained. The importance of agriculture demands that appropriate training be provided for the farmers of the future as well as for those who work in agricultural-related industries and services. In addition, industrial growth and the decline in rural population have created a demand for training people migrating from rural areas and for retraining and upgrading individuals already in the work force.

A major new educational resource is currently developing in Iowa to meet the increased training needs. The passage of the Area School Act in 1965 has made possible the establishment of area vocational schools and community colleges. At the time of this report all but seven of Iowa's ninety-nine counties are being served by fifteen merged areas for education. Ten of these merged areas have established area community colleges and five have established area vocational schools.

Industrial growth, a low unemployment rate, and the development of new educational institutions have created a need for a central source of concern, interest, initiative, coordinating effort and information on occupational research as it relates to vocational-technical education planning. The RCU was established to fulfill this need. The Unit, therefore, initiates activity to stimulate, encourage, coordinate and conduct research on employment opportunities, human resources, and educational resources development as a base for the development and planning of vocational training programs, curricula, and facilities.

Specific activities related to the above general purpose and objective were outlined in the project proposal (see Appendix A). However, experience during the first year indicated the need for the RCU staff to shape its activities in terms of the operational situation and not just in terms of research. Two interrelated functions, therefore, emerged--research and staff support--as being the focal points for RCU activities. The RCU staff has attempted to avoid an immediate imposition of "what ought to be" in favor of an evolving, joint process of awareness, identification and decision-making concerning research action.

As Unit staff reviewed experiences and activities while preparing a continuation proposal, it seemed advisable to develop a definite set of objectives. A listing of objectives not only helps in giving direction to activities and planning priorities but also provides a mechanism for evaluation. A set of ten objectives was developed which encompassed both the original list of activities and the experience of the Unit during the first year. Specific activities thus became examples of the ways and means of accomplishing the following objectives (see Appendix B):

1. To collect and disseminate information on employment opportunities, human resources, and educational programs.
2. To stimulate and encourage research on employment opportunities, human resources, and educational programs.
3. To identify issues and problems which require study through research.
4. To establish and maintain working relationships with agencies, institutions, and organizations which are concerned with employment, human resources, and education.
5. To provide support for line personnel in the Division of Vocational Education.
6. To assist in the planning and development of secondary and post-secondary educational programs, facilities, and staff.
7. To assist in the development of a statewide computer-based system of vocational-technical education information.
8. To assist in the evaluation of vocational and technical education programs.
9. To promote vocational and technical education.
10. To coordinate activities and exchange information with selected states.

II. METHOD

The RCU is located in the State Department of Public Instruction and is responsible to the Associate Superintendent for Vocational Education (see Appendix C). Unit personnel have a staff function relationship to Division of Vocational Education personnel. The Unit also serves in an advisory capacity to the administrative personnel of the State Department of Public Instruction and through this group to the State Board of Public Instruction on matters related to occupational research.

The coordination of research relationships with the three state institutions of higher education was carried out through a staff research coordinator at each institution. Each staff research coordinator had a graduate assistant supported by the RCU to assist him in gathering information about occupationally related research done at his institution.

The RCU staffing pattern included a director, an associate director, an agency research coordinator, and an assistant for review and publication. The director and associate director had primary responsibilities for coordinating research activities with the state institutions of higher education. The agency research coordinator had a primary responsibility for establishing and maintaining liaison with governmental agencies, businesses and industries. The assistant for review and publication's duties were encompassed by the title. All Unit personnel had the responsibility of maintaining working relationships on matters relating to occupational research with those agencies and groups actively engaged in, or otherwise concerned about, matching individuals, training and employment opportunities.

RCU staff members served in a consultative capacity to initiators of research proposals requesting grants from state ancillary funds. They also informed individuals about potential research problems. The RCU director served as a member of the State Committee on Research, Demonstration, and Experimental Programs (see Appendix D). This committee reviewed and recommended approval of research projects to the Director and Associate Superintendent of Vocational Education. The committee also was utilized for consulting, advising and evaluating the activities of the RCU.

III. RESULTS

The results or accomplishments of the RCU must be measured both in terms of the total process in which vocational education is involved at present in Iowa as well as the specific activities that have been done or are being done. The coordination function and therefore many of the objectives and activities must be of a continuous nature. This section is devoted to brief summaries of the accomplishments related to each of the Unit's objectives.

A. Collect and Disseminate Information

In the absence of a statewide occupational survey, the RCU staff gathered employment opportunities data from census projection studies, demand occupation listings, and reports of various kinds. Data were then organized as information sheets to be distributed to those persons concerned with establishing vocational and technical education programs.

The Unit has a magnetic tape which includes the names, addresses, and Standard Industrial Classification of approximately 28,000 Iowa manufacturing and non-manufacturing establishments which employ four or more individuals. The material is available for use in conducting studies relative to employment opportunities.

Occupational surveys of the membership of two Iowa trade associations were completed. Basic work was done for a survey of the membership of a third association. In addition, contacts were made with other associations that might be interested in similar surveys.

Unit staff have continuously enlarged and organized a file of vocational education references. Substantial quantities of curriculum materials, general references and research reports are on file in the RCU. Much work remains to be done on this phase of RCU activity. The major subject matter headings of the reference file are shown in Appendix K. The Unit distributed a substantial number of articles, reports, and abstracts to a variety of individuals and groups. A list of these may be seen in Appendix L.

Abstracts of research conducted at the three Iowa graduate institutions were prepared by research assistants under the direction of staff research coordinators at the institutions. Abstracts are available in the areas of agricultural and trade and industrial education.

B. Stimulate and Encourage Research

A great deal of time and effort was devoted to grouping forces and exploring ways and means of conducting a statewide occupational survey in Iowa. This survey has not materialized. However, a Manpower and Job Market Information Committee has been organized and has held an organizational meeting. The purpose of this committee is to coordinate activities in the process of collecting and disseminating information relative to human resources and employment opportunities in the State of Iowa. Agencies represented on this committee are: Iowa Employment Security Commission, Iowa Manpower Development Council, Iowa Development Commission, and the Department of Public Instruction.

The Unit published a brochure to promote its activities. Work was done to assist the director of vocational education in preparing brochures on vocational and technical education in Iowa. These publications have not been completed.

Members of the RCU participated in conferences and seminars to orient graduate students and vocational and non-vocational professional personnel relative to the RCU, its purposes, and research.

RCU staff held discussions with individuals who were interested in conducting research as to preparation of proposals, problems to be researched, and in the conduct of the studies once the projects were underway. These discussions were vital to the review, consideration, and funding of twenty-three research projects supported by 4(a) funds (see Appendix E).

C. Identify Potential Research Problems

As noted under objective number 1, RCU personnel worked with members of a number of associations, listed in Appendix I, to promote, and assist with occupational surveys of their membership.

Efforts were made to ferret out problem areas to be researched. Division personnel are evidencing much interest in identifying "practical" research problems. A limited number of contacts were made with area school administrative personnel to discuss their problems. Much more must be done to work with local school personnel and individuals responsible for areas of education at the state level, e.g., agriculture, home economics, health occupations, business and office occupations, distributive education, trades and industries, and Manpower Development and Training, to develop a list of basic problems which can be researched. Results would provide more direct assistance to vocational and technical educators in Iowa.

The RCU members met with individuals in the Upper Midwest Region to discuss and identify mutual research problems.

D. Establish and Maintain Working Relationships

Contacts were made with approximately one hundred institutions, agencies, and organizations during the RCU funding period (see Appendix H). The purposes of these contacts were to give information about the RCU and its functions, to collect information for use in the development of a directory of manufacturing and non-manufacturing establishments, to learn of training needs for referral to the appropriate section in the Division of Vocational Education responsible for this kind of instruction, to gather information of value to vocational and technical educators in Iowa, and to lay the groundwork for cooperative effort on projects of mutual concern, e.g., educational programs and research. As mentioned in connection with objective number 2, the organization of a Manpower and Job Market Information Committee has been an outcome of these contacts.

RCU personnel attended and participated in a number of local, regional, and national conferences and seminars (see Appendix F). These contacts have led to a more personal interchange of ideas and materials with individuals in Iowa and outside of the State.

E. Provide Support for Line Personnel

Many of the RCU activities logically contributed to this objective as well as others. In fact, the philosophy of the RCU staff has been such that substantial time and effort were devoted to activities which contributed to the accomplishment of this objective.

Articles, reports, and abstracts included in Appendix L were screened and distributed to line personnel for the purposes of keeping them informed and providing them with some assistance.

Members of the RCU actively participated in committee work which involved representatives of various institutions, agencies, and organizations as well as Department of Public Instruction staff. This activity was concerned with such things as: research, interagency relations, area school standards and guidelines, and the study of post high school education in Iowa. The committees on which RCU personnel were active are listed in Appendix G.

Upon requests of administrative personnel in the Department of Public Instruction RCU personnel prepared material for a variety of publications. Among these assignments were:

Projected Programs of Activities
Amendments to the Iowa State Plan for Vocational Education
Iowa Cooperative Study of Post High School Education
Area School Standards
Area School Guidelines for Organization and Facilities

During the first eighteen months of Iowa RCU operation, requests for information about vocational and technical education in the State were received, either directly or indirectly, and were answered.

Numerous reports and articles pertaining to vocational and technical education were prepared, distributed, and, in some instances, published in association news media. In addition, the RCU staff worked with line personnel in the Division of Vocational Education to formulate a tentative new industry training policy for further consideration by the Department of Public Instruction administrators. During contacts with agencies, institutions, and organizations, as noted under objective number 4, the need for educational programs was brought to light, and referrals were made to Division of Vocational Education line personnel for implementation (see Appendix J).

F. Assist in Programs, Facilities, Staff Development

Unit staff members prepared material and participated in committee work in connection with the development of guidelines for area school organization and facilities. Much time and effort were devoted to collecting curriculum and course outlines and related materials useful in the development of educational programs. Assistance was given in the formulation of a tentative curriculum approval procedure which was submitted to the administration of the Department of Public Instruction for consideration.

RCU staff members participated in discussions relative to developing a plan for the establishment of prevocational centers in Iowa.

RCU personnel assisted with the orientation and organization of area school boards. Assistance also was given to merged area boards and school personnel in regard to facilities and curriculum development.

G. Assist in Information System Development

The RCU had nominal responsibility for coordinating efforts to develop a vocational education information system. A system analyst and a programmer attached to the Data Processing Division were responsible for developing the system and for providing data processing services to the RCU.

Substantial progress was made in building a data bank in each of four areas: staff, students, inventory, and reimbursement. The system for the reporting, recording, and retrieval of information about school staff was completed and made operational. A system for reimbursement information was developed and test year data (1965-66) collected. As soon as machine time is available, a parallel reimbursement report will be run and checked against the 1965-66 manual report on reimbursement which was submitted to the U.S. Office of Education. The programs for an inventory information system were completed and collection of data was partially accomplished. It is anticipated, however, that there will be a substantial time lag before system corrections can be accomplished. Forms for collecting student data were developed pending approval.

All information for each school is being stored in one file regardless of the type of information. This system reduces the number of separate requests made to a school for information. It also facilitates the retrieval of any specific item of information about a given school.

H. Assist in Program Evaluation

A review of the activities during the eighteen month period indicates that relatively little was done by the RCU staff in program evaluation.

The RCU staff was called upon to gather and summarize data relative to vocational education programs and enrollments in Iowa during 1965-66 as requested of the Division of Vocational Education by The Center for Studies in Vocational and Technical Education at the University of Wisconsin.

Some contributions were made by the RCU staff on a projected evaluation plan for the Division of Vocational Education Projected Plan of Activities.

I. Promote Vocational and Technical Education

A RCU brochure was prepared and distributed.

Work with personnel in the Department of Public Instruction and with line personnel in the Division of Vocational Education was concerned with the promotion of certain aspects of vocational and technical education.

As participants at conferences, seminars, and meetings, RCU personnel presented information about the functions of the RCU, the development and operation of area schools in Iowa, and occupational research.

Whenever RCU personnel made contact with representatives of agencies, institutions, and organizations, the staff promoted up-to-date concepts of vocational and technical education.

J. Cooperate with Other States

Progress reports, lists of 4(a) funded research projects, and brochures were distributed to the other RCUs in the United States (see Appendix E). In turn, the RCUs reciprocated, to the advantage of all.

Whenever specific requests for information were received by the RCU, directly or by referral, efforts were made to provide as complete responses as practical in terms of the desired information and its availability.

Attendance at regional and national meetings provided opportunities to share ideas and materials on both a formal and informal basis (see Appendix F). The Upper Midwest Regional Educational Laboratory provided a framework for research personnel in the Upper Midwest to cooperate in solving mutual problems and interchanging materials.

The Iowa RCU cooperated with these Centers:

The Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio (ERIC depository)

The Center for Studies in Vocational and Technical Education, University of Wisconsin, Madison, Wisconsin

K. Summary

Ten objectives, in abbreviated form, were established as the goals to be accomplished:

1. Collect and disseminate information
2. Stimulate and encourage research
3. Identify potential research problems
4. Establish and maintain working relationships
5. Provide support for line personnel
6. Assist in programs, facilities, and staff development
7. Assist in information system development
8. Assist in program evaluation
9. Promote vocational and technical education
10. Cooperate with other states.

The foregoing presentation has provided highlights in terms of specific activities undertaken to accomplish each Unit objective. As indicated throughout the text, RCU activities in many instances overlapped several objectives.

IV. DISCUSSION

In the previous section, emphasis has been given to highlighting those activities which have contributed to the accomplishment of objectives. In order to obtain some assessment of the total contribution of the RCU operations, the staff has reorganized some data and added information from other sources. This section is devoted to a discussion of RCU objectives and activities and solicited evaluative information.

A. Objectives and Activities

First of all, the progress reports of the Unit were analyzed, and forty-seven activities were identified. While these activity statements do not reflect every minute detail of staff involvement, they do reflect the work of the staff in terms of a practical and manageable list which for all intents and purposes is inclusive. These activities were then related to the objectives to which they contributed. The configuration of these relationships is shown in Table 1 on pages 11 through 15.

The objectives which received the greatest frequency of activities, in rank order, were: provide support for line personnel, stimulate and encourage research, and collect and disseminate information. Those objectives for which there were fewest activities were: identify potential research problems and assist in program evaluation.

Next, the forty-seven activities were analyzed in terms of the time and effort expended during the period, and they were classified as major or minor activities. Twenty of the activities were considered major and twenty-seven were considered minor. The activities so classified are shown in Table 2 on pages 16 through 19.

Also shown in Table 2 are the ratings in terms of the degree of importance of each activity to the Division of Vocational Education as rated by the Associate Superintendent and the Director of Vocational Education.

A summary of the comparison between time and effort expended on activities by the RCU staff and the importance attached to each activity is provided in table 3 on page 20. It is to be noted that of the twenty activities classified as major, fifteen were rated as very important and five were rated as important.

B. Solicited Evaluative Information

In view of the projected continuation and the staff support function of the RCU, the Unit staff also solicited evaluative information from several sources. The purpose was twofold--how well did the Unit do in the eyes of those with whom the staff worked, and what suggestions for future improvement would others have. Sources used were the Associate Superintendent and the Director of Vocational Education, chiefs of sections in the Division of Vocational Education, representatives of groups with whom the staff has worked closely and representatives of the community college and data processing divisions within the Department of Public Instruction. Two types of information were sought--responses to questions on an evaluation survey form and evaluative statements about the activities of the Unit.

TABLE 1

RELATIONSHIP BETWEEN THE RCU ACTIVITIES AND THE RCU OBJECTIVES

ACTIVITIES	OBJECTIVES									
	Collect and disseminate information	Stimulate and encourage research	Identify potential research problems	Establish and maintain working relationships	Provide support for line personnel	Assist in programs, facilities, staff development	Assist in voc. educ. information system development	Assist in program evaluation	Promote vocational-technical education	Cooperate with other states
*Collection, organization, and distribution of statistics on employment needs	X									
*Development of directory of manufacturing and nonmanufacturing establishments by SIC	X									
*Promotion of and assistance with trade association occupational surveys (Appendix I)	X		X	X	X					
*Development of a reference library (Appendix K)	X				X					
*Preparation of research abstracts	X									
Maintenance of a file of newspaper clippings relating to VE in Iowa	X									
Distribution of pertinent articles, reports and abstracts (Appendix L)	X				X					
Informing visitors about educational activities in Iowa	X			X						X
*Stimulation of statewide occupational survey		X								
*Preparation of brochures		X							X	

*Major activities based on time and effort expended by RCU staff.

TABLE 1 (Continued)

ACTIVITIES	OBJECTIVES									
	Collect and disseminate information	Stimulate and encourage research	Identify potential research problems	Establish and maintain working relationships	Provide support for line personnel	Assist in programs, facilities, staff development	Assist in voc. educ. information system development	Assist in program evaluation	Promote vocational-technical education	Cooperate with other states
*Encouragement of occupational and educational research		X								
*Participation in review, consultation, and conduct of research proposals and projects		X								
Development of procedures for processing research proposals		X								
Preparation of Iowa RCU Continuation Proposal		X								
Coordination of research activities with the three State Educational Institutions		X								
Listing of research personnel in Iowa		X								
Cooperation in the planning of a health occupations survey for Iowa		X			X					
Planning proposal for Manpower and Job Information Committee		X		X						
Preparation and distribution of RCU quarterly progress reports		X								X
Encouragement of training of research personnel		X								

TABLE 1 (Continued)

	OBJECTIVES									
ACTIVITIES	Collect and disseminate information	Stimulate and encourage research	Identify potential research problems	Establish and maintain working relationships	Provide support for line personnel	Assist in programs, facilities, staff development	Assist in voc. educ. information system development	Assist in program evaluation	Promote vocational-technical education	Cooperate with other states
Explanation of RCU functions		X		X						
Listing of potential research problems			X							
Consultation with area school administrative personnel			X	X		X				
*Establishment of working relations with other groups (Appendix H)				X						
Participation and attendance in conferences and seminars (Appendix F)				X					X	X
*Participation on committees (Appendix G)					X					
*Responding to requests for data relative to VE in Iowa					X					X
*Preparation of area school standards					X					
*Preparation of DVE projected programs of activities					X					
*Preparation of reports and articles regarding VE					X					
*Preparation of materials for Iowa Cooperative Study of Post High School Education					X					

TABLE 1 (Continued)

ACTIVITIES	Collect and disseminate information	Stimulate and encourage research	Identify potential research problems	Establish and maintain working relationships	Provide support for line personnel	Assist in programs, facilities, staff development	Assist in voc. educ. information system development	Assist in program evaluation	Promote vocational-technical education	Cooperate with other states
Modification of and amendments to Iowa State Plan for VE					X					
Formulation of new industry training policy					X				X	
Referral of training requests (Appendix J)					X					
Assistance with orientation and organization of area school boards					X	X				
Recommendations for DPI interagency officer position					X					
Preparation of guidelines for area school organization and facilities					X	X				
Collection of selected information with implications for VE from individuals and agencies					X	X				
*Collection of curriculum materials						X				
Development of a plan for prevocational centers						X				
Formulation of curriculum approval procedure						X				
*Preparation of area school report forms							X			

TABLE 1 (Continued)

ACTIVITIES	OBJECTIVES									
	Collect and disseminate information	Stimulate and encourage research	Identify potential research problems	Establish and maintain working relationships	Provide support for line personnel	Assist in programs, facilities, staff development	Assist in voc. educ. information system development	Assist in program evaluation	Promote vocational-technical education	Cooperate with other states
*Application of data processing techniques to VE reporting							X			
*Analysis and summarization of VE student data							X	X		
Preparation of a projected evaluation plan for VE								X		
Development of techniques and instruments for evaluation								X		
Presentation of promotional and informational talks									X	

TABLE 2

RELATIONSHIP BETWEEN THE CLASSIFICATION AND IMPORTANCE OF RCU ACTIVITIES

ACTIVITY	Classification of Activity		Importance of Activity		
	Major	Minor	Very Important	Important	Of Little Importance
Collection, organization, and distribution of statistics on employment needs	X		X		
Development of directory of manufacturing and nonmanufacturing establishments by SIC	X			X	
Promotion of and assistance with trade association occupational surveys (Appendix I)	X		X		
Development of a reference library (Appendix K)	X			X	
Preparation of research abstracts	X			X	
Maintenance of a file of newspaper clippings relating to VE in Iowa		X		X	
Distribution of pertinent articles, reports and abstracts (Appendix L)		X	X		
Informing visitors about educational activities in Iowa		X		X	
Stimulation of statewide occupational survey	X		X		
Preparation of brochures	X			X	
Encouragement of occupational and educational research	X		X		
Participation in review, consultation, and conduct of research proposals and projects	X		X		

TABLE 2 (Continued)

ACTIVITY	Classification of Activity		Importance of Activity		
	Major	Minor	Very Important	Important	Of Little Importance
Development of procedures for processing research proposals		X	X		
Preparation of Iowa RCU Continuation Proposal		X		X	
Coordination of research activities with the three State Educational Institutions		X	X		
Listing of research personnel in Iowa		X		X	
Cooperation in the planning of a health occupations survey for Iowa		X		X	
Planning proposal for Manpower and Job Information Committee		X	X		
Preparation and distribution of RCU quarterly progress reports		X		X	
Encouragement of training of research personnel		X		X	
Explanation of RCU functions		X		X	
Listing of potential research problems		X		X	
Consultation with area school administrative personnel		X	X		
Establishment of working relations with other groups (Appendix H)	X		X		
Participation and attendance in conference and seminars (Appendix F)		X		X	

TABLE 2 (Continued)

ACTIVITY	Classification of Activity		Importance of Activity		
	Major	Minor	Very Important	Important	Of Little Importance
Participation on committees (Appendix G)	X		X		
Responding to requests for data relative to VE in Iowa	X		X		
Preparation of area school standards	X		X		
Preparation of DVE projected programs of activities	X		X		
Preparation of reports and articles regarding VE	X			X	
Preparation of materials for Iowa Cooperative Study of Post High School Education	X		X		
Modification of and amendments to Iowa State Plan for VE		X			X
Formulation of new industry training policy		X		X	
Referral of training requests (Appendix J)		X		X	
Assistance with orientation and organization of area school boards		X		X	
Recommendations for DPI interagency officer position		X	X		
Preparation of guidelines for area school organization and facilities		X	X		
Collection of selected information with implications for VE from individuals and agencies		X	X		

TABLE 2 (Continued)

ACTIVITY	Classification of Activity		Importance of Activity		
	Major	Minor	Very Important	Important	Of Little Importance
Collection of curriculum materials	X		X		
Development of a plan for prevocational centers		X		X	
Formulation of curriculum approval procedure		X	X		
Preparation of area school report forms	X		X		
Application of data processing techniques to VE reporting	X		X		
Analysis and summarization of VE student data	X		X		
Preparation of a projected evaluation plan for VE		X	X		
Development of techniques and instruments for evaluation		X	X		
Presentation of promotional and informational talks		X	X		

TABLE 3

RELATIONSHIP BETWEEN THE RATING AND THE NUMBER OF RCU MAJOR AND MINOR ACTIVITIES

RATING	NUMBER OF ACTIVITIES MAJOR	 MINOR	TOTALS
Very Important	15	12	27
Important	5	14	19
Of Little Importance	0	1	1
Totals	20	27	47

Responses to an evaluation survey were solicited from eight Divisions of Vocational Education personnel and two representatives of other Department of Public Instruction divisions. Nine of the ten individuals responded to the set of six questions (see Appendix M).

Responses to the first two questions--briefly, what do you feel are and what should be the functions of the RCU--indicated that the respondents have a good general understanding of the role of the RCU. Individual responses related closely to the stated objectives and activities of the Unit. A notable emphasis of the responses to "what should be the functions of the RCU" was that of research activity.

The next two questions asked for specific activities carried out by the RCU which have assisted and in the future would assist the respondents in carrying out their own functions. Analysis of the responses indicated that the respondents did not associate many of the RCU activities listed previously with their own.

Two respondents felt that none of the activities of the Unit had assisted them in carrying out the functions of their own positions. Information supplied by the RCU about employment opportunities and needs was most frequently mentioned as an activity which was helpful to the respondents. The RCU staff, on the other hand, considered a large number of the activities as being staff support activities (see Table 1). This suggests that RCU activities may be related more to the general operation of the Division than to the specific functions of individual personnel.

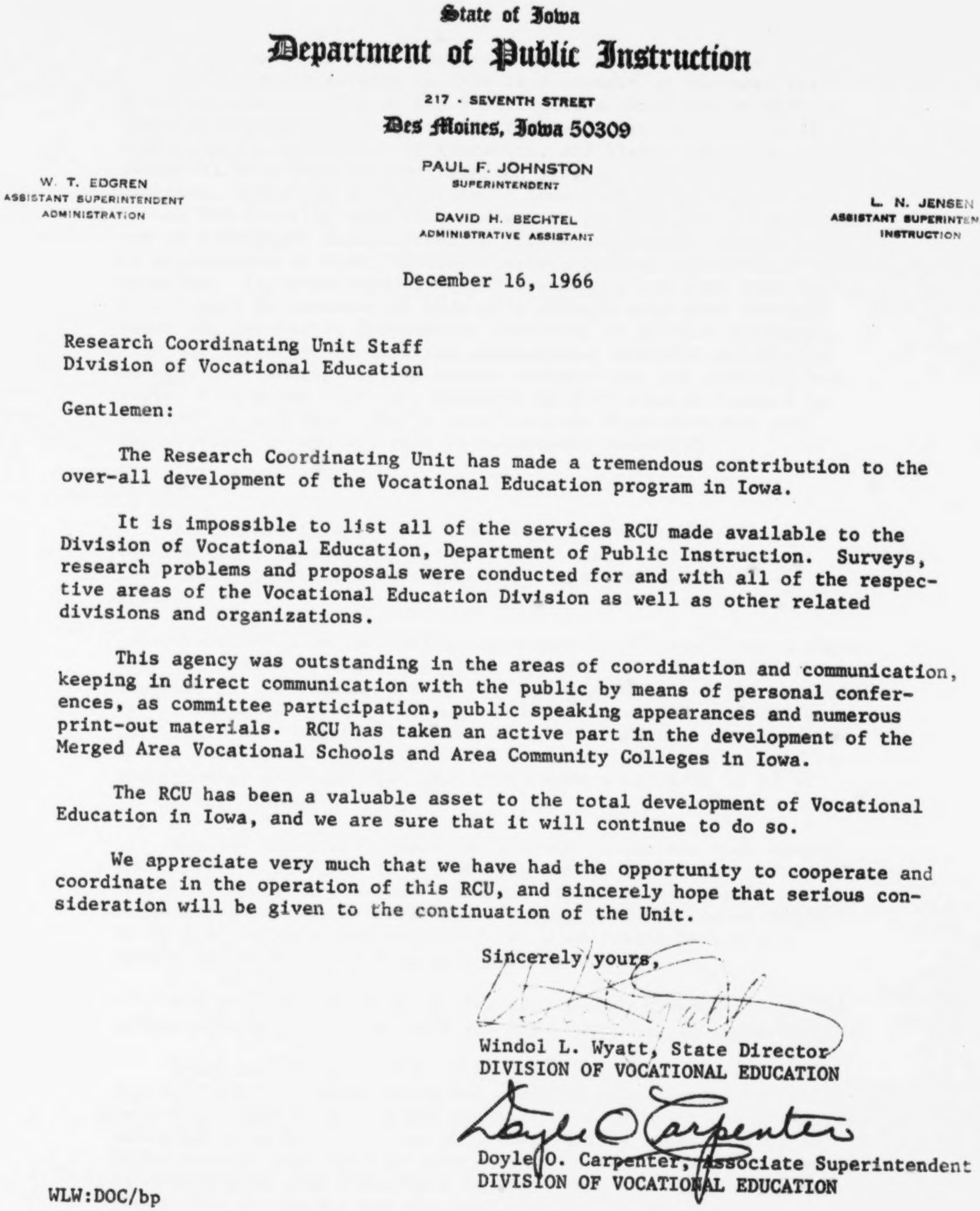
However, the respondents listed several activities on which the RCU could place emphasis to be of most assistance in fulfilling their individual functions. Significantly, the two activities most frequently mentioned were a statewide occupational survey to assist in ascertaining and justifying the need for specific occupational programs and the development of evaluation and follow-up studies. Unit staff considered their efforts toward a statewide occupational survey as a major activity although little has been accomplished other than exploration of ways and means. Time and effort in the area of evaluation were such that it had to be classified by the Unit staff as a minor activity, but rated as very important by the administrative personnel of the Division (see Table 2).

The last two questions asked for opinions about significant contributions and serious shortcomings of the RCU operation. Responses were varied with very little consensus other than some agreement that RCU activity in the area of labor market needs was a significant contribution. The serious shortcomings listed by the respondents could not be grouped sufficiently to establish any consensus. There was some slight indication that the Unit has not publicized or been publicized sufficiently, that it has perhaps engaged in administrative support tasks to the detriment of research coordination, and that there is difficulty in attracting and keeping personnel.

Memorandums were sent to the Associate Superintendent and the Director of the Division of Vocational Education requesting a statement for this report relative to the impact of the RCU on vocational and technical education in Iowa. Letters were sent to members of the State Committee on Research, Demonstration, and Experimental Programs; the Chairman of the State Advisory Committee for Vocational Education; and to a representative from each of three agencies with whom the RCU has been working quite closely. Responses were received from eight of the ten individuals to whom requests were directed. Copies of the memorandum, the letters of request, and the responses are included in Appendix N.

The impact of the RCU on vocational and technical education as expressed by the Associate Superintendent and the Director of the Division of Vocational Education is described in Figure 1.

From the remaining responses, it appears that the RCU has been accepted as a group to perform much needed and important services in the development of vocational and technical education in Iowa. It is agreed that a start has been made but that much remains to be accomplished. It is felt that emphasis should be placed on the currently needed and the more practical types of research. Indications are that efforts made by the RCU staff to cooperate with other agency representatives have been well received; however, there is the indication that the RCU and its



State of Iowa
Department of Public Instruction
217 - SEVENTH STREET
Des Moines, Iowa 50309

PAUL F. JOHNSTON
SUPERINTENDENT

DAVID H. BECHTEL
ADMINISTRATIVE ASSISTANT

W. T. EDGREN
ASSISTANT SUPERINTENDENT
ADMINISTRATION

L. N. JENSEN
ASSISTANT SUPERINTENDENT
INSTRUCTION

December 16, 1966

Research Coordinating Unit Staff
Division of Vocational Education

Gentlemen:

The Research Coordinating Unit has made a tremendous contribution to the over-all development of the Vocational Education program in Iowa.

It is impossible to list all of the services RCU made available to the Division of Vocational Education, Department of Public Instruction. Surveys, research problems and proposals were conducted for and with all of the respective areas of the Vocational Education Division as well as other related divisions and organizations.

This agency was outstanding in the areas of coordination and communication, keeping in direct communication with the public by means of personal conferences, as committee participation, public speaking appearances and numerous print-out materials. RCU has taken an active part in the development of the Merged Area Vocational Schools and Area Community Colleges in Iowa.

The RCU has been a valuable asset to the total development of Vocational Education in Iowa, and we are sure that it will continue to do so.

We appreciate very much that we have had the opportunity to cooperate and coordinate in the operation of this RCU, and sincerely hope that serious consideration will be given to the continuation of the Unit.

Sincerely yours,

Windol L. Wyatt, State Director
DIVISION OF VOCATIONAL EDUCATION

Doyle O Carpenter

Doyle O. Carpenter, Associate Superintendent
DIVISION OF VOCATIONAL EDUCATION

WLW:DOC/bp

Figure 1.--A statement of the impact of the RCU on vocational and technical education in Iowa.

functions should be made known to a wider audience in the State of Iowa. Closely related to this is a comment on the need for a better understanding of the contributions which can be made or the functions which can most effectively be performed by local school, state department of education, and higher education personnel in a constructive research program in vocational and technical education in the State of Iowa. It is felt there is a need for devoting more time and effort to point out, to motivate, and to coordinate needed research within and between groups and to disseminate or share information to a greater extent with other agencies. Improved communications are needed and more time and effort must be expended in view of a comment made that the Manpower and Job Market Information Committee to provide coordination and direction to existing occupational research activities as well as planning further needed research has not materialized. It is to be noted that this activity as indicated in Table 2 is considered very important by the Associate Superintendent and the Director of the Division of Vocational Education.

C. Summary

Activities in which RCU staff was involved were related to the RCU objectives to which they contributed. The activities undertaken contributed to the ten objectives established as goals.

The forty-seven activities in which the RCU staff was engaged were classified as major and minor in terms of time and effort expended by the staff. Twenty were considered major; the remainder were considered minor. Fifteen of the twenty major activities were rated very important to the Division of Vocational Education by the administrative heads of the Division; whereas, five of the twenty were rated as important. None were considered to be of little importance.

The RCU has been accepted as a group to perform much needed and important services in the development of vocational and technical education in Iowa. The RCU staff has developed a cooperative working relationship with personnel of the Division of Vocational Education, and efforts to cooperate with other agency representatives have been well received.

The staff has taken an active part in the development of the merged area vocational schools and area community colleges in Iowa.

There is a need for more publicity concerning the RCU and its functions. A need exists for a better understanding of the part that local school, state department of education, and higher education personnel can play in a constructive research program in vocational and technical education in Iowa. There is a need to devote more time and effort to point out, to motivate, and to coordinate the needed and the more practical types of research within and between groups and to disseminate and share information to a greater extent with other agencies.

Two areas of activity which the RCU ought to emphasize are: research to assist in ascertaining and justifying the need for vocational and technical education programs and the development of techniques and instruments for the evaluation of educational programs.

V. CONCLUSIONS AND IMPLICATIONS

The Iowa RCU staff has developed a cooperative working relationship with the Division of Vocational Education personnel. This has been accomplished within the framework of two specific functions--research and staff support. The staff recognizes that these two functions are interrelated, particularly at present with statewide area school development. The RCU staff has attempted to start where other personnel are with respect to their attitudes toward using research. The staff has avoided an immediate imposition of what ought to be in favor of an evolving, joint process of awareness, identification, and decision-making concerning research action. This process is deemed to be more important than are the individual accomplishments of the RCU.

Divisional personnel have become increasingly interested and involved in research. There has been an increased responsiveness to the task of identifying basic problems. However, more time and effort need to be devoted to this activity. Emphasis should be on the currently needed, more practical types of research.

There is a definite need in Iowa to conduct a statewide occupational survey on a continuing basis to assist in ascertaining and justifying the need for specific occupational programs in schools throughout the state. The unit staff considered their efforts toward a statewide occupational survey as a major activity. Ways and means for accomplishing this task have been explored; however, these efforts have not materialized in an on-going statewide occupational survey. A directory of manufacturing and nonmanufacturing establishments is available on magnetic tape. Some association membership occupational surveys have been completed. Graduate studies pertaining to surveys on a limited occupational basis statewide have been funded from 4(a) funds, and have been completed or are in process. Assistance has been given to formulating a pilot-feasibility study for a comprehensive research program in health manpower.

Basic foundations have been laid for continued cooperation with state institutions of higher learning, the primary source of research resources, and with "world of work" organizations and other state agencies. These are important groups in determining what is needed and how things are done. Firm foundations have been laid where none existed or where previously they were limited. The walls are yet to be constructed.

There is a need to devote more time and effort to point out, to motivate, and to coordinate currently needed, more practical types of research within and between associations, business and industry, communities, educational institutions, and public agencies and to disseminate and share information to a greater extent with these groups.

The greatest amount of time and effort expended by the RCU staff has been to provide support for line personnel in the Division of Vocational Education. To an extent, the staff has been engaged in administrative support tasks to the detriment of research coordination activities.

The RCU has been accepted as a group to perform much needed and important services in the development of vocational and technical education in Iowa. Line personnel in the Division of Vocational Education appear to have a good general understanding of the role of the RCU. Efforts to cooperate with other agency representatives have been well received. However, the RCU and its functions should be made better known to a much wider audience in the State of Iowa.

There is a need for a better understanding of what local school, state department of education, and higher education personnel can contribute or the functions which they can most effectively perform in a constructive research program in vocational and technical education in the State of Iowa.

Despite the on-going need for evaluation and the fact that a nationwide evaluation of programs funded from appropriations set up for the Vocational Education Act of 1963 is soon to be undertaken, little has been done to assist in program evaluation.

Substantial quantities of curriculum materials, general references, and research reports have been collected, and they are on file in the RCU at this time.

A substantial portion of the time and effort of the RCU staff has been devoted to projects relating to planning for the development of area school organization, staffing, programs, and facilities. Based on this past involvement, the fact that area school development in Iowa is new, and the fact that many activities which pertain to area school development are of a creative and research nature, it is very likely that the RCU staff will continue to participate in area school planning and development activities.

During the eighteen month period, activities were undertaken which contributed to the ten objectives established as goals to be accomplished. These activities, however, covered a wide spectrum so that the factors of time and effort were spread thinly and were not evenly distributed among all of the objectives. While each of the ten objectives remains important, there is an apparent need to reconsider priorities among these objectives during the continuation period. An implication is that perhaps less time should be spent on administrative support tasks and more on research coordination.

VI. SUMMARY

The setting in which the Iowa RCU is operating is one of transition and growth. Iowa is experiencing substantial industrial growth stemming from a strong agricultural base. Population shifts from rural to urban areas are still occurring. An important element in this transition is the system of merged area schools currently developing in Iowa.

The RCU was established to initiate activity to stimulate, encourage, coordinate, and conduct research on employment opportunities, human resources, and educational resources development as a base for the development and planning of vocational and technical training programs, curricula, and facilities.

The following ten objectives, in abbreviated form, were established as the goals to be accomplished:

1. Collect and disseminate information
2. Stimulate and encourage research
3. Identify potential research problems.
4. Establish and maintain working relationships
5. Provide support for line personnel
6. Assist in programs, facilities, and staff development
7. Assist in information system development
8. Assist in program evaluation
9. Promote vocational and technical education
10. Cooperate with other states.

An analysis of the relationship of the forty-seven activities in which the RCU staff was engaged and the objectives of the Unit indicates that the activities undertaken contributed to the ten objectives. The activities were classified as major and minor in terms of time and effort expended by the staff. Twenty were considered major; the remainder were considered minor. Fifteen of the twenty major activities were rated very important to the Division of Vocational Education by the administrative heads of the Division; whereas, five of the twenty were rated as important. None were considered to be of little importance.

The RCU has been accepted as a group to perform much needed and important services in the development of vocational and technical education in Iowa. The RCU staff has developed a cooperative working relationship with personnel of the Division of Vocational Education, and efforts to cooperate with other agency representatives have been well received.

The staff has taken an active part in the development of the merged area vocational schools and area community colleges in Iowa.

There is a need for more publicity concerning the RCU and its functions. A need exists for a better understanding of the part that local school, state department of education, and higher education personnel can play in a constructive research program in vocational and technical education in Iowa. There is a need to devote more time and effort to point out, to motivate, and to coordinate the needed and the more practical types of research within and between groups and to disseminate and share information to a greater extent with other agencies.

Two areas of activity which the RCU ought to emphasize are: research to assist in ascertaining and justifying the need for vocational and technical education programs and the development of techniques and instruments for the evaluation of educational programs.

VII. APPENDICES

A. RCU Original Proposal Activities
B. RCU Continuation Proposal Objectives and Activities
C. Research Coordinating Unit Organization Chart
D. The State Committee on Research, Demonstration, and Experimental Programs
E. Research Projects Funded
F. Conferences and Seminars
G. Committee Participation
H. Groups Contacted
I. Occupational Surveys
J. Training Referrals
K. Reference File
L. Record of Material Distributed Through the Iowa RCU
M. RCU Evaluation Survey
N. Letters

RCU ORIGINAL PROPOSAL ACTIVITIES[1]

Examples of specific activities for which the unit will provide leadership and/or coordination are as follows:

1. To develop a directory and classify all cooperating institutions, agencies, and organizations that will participate in occupational research activities in cooperation with the coordinating unit.

2. To conduct an inventory of available data and research on employment, human resources, development and training from those cooperating in (1) above. To review the research and establish a common definition of terms so data from one source will be compatible with other sources.

3. To develop techniques and procedures for processing; the collection, classification, summarization or tabulation, storage, retrieval, and dissemination of information on employment opportunities, human resources, development and training.

4. To utilize the occupational research to identify issues and problems and for the continuous evaluation of vocational education offered in the state.

5. To participate in the review, monitoring or conduct, as appropriate, of occupational research and development projects supported by Federal, State, local or private organizational funds.

6. To encourage and coordinate pre-service and in-service training of vocational researchers in vocational and technical education.

7. To use the existing facilities and procedures within the Department of Public Instruction, when practical, for the dissemination of information on the progress and applications of the results of occupational education research.

8. To study the educational levels of people as related to employment opportunities.

9. To study occupations in terms of clusters of fields requiring similar training for employment.

10. To determine employment opportunities in selected areas or communities.

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[1] Duration: June 1, 1965 - November 30, 1966

Activities (Continued)

11. To determine training needs by occupational surveys of agricultural, managerial, business, technical, industrial, service, and other occupational areas.

12. To conduct continuous analysis of local areas to determine vocational needs in order to provide appropriate programs for employment.

13. To study the occupational needs for training and retraining of adults in local communities.

14. To study opportunities for part-time and work study programs for vocational education students.

15. To determine the employment opportunities and training needs for technicians in the state with projections through 1975.

16. To study the needs of business and industry to upgrade the present work force into higher skilled jobs and to adapt to changing technology.

17. To study the needs of business and industry with regard to the skills and related knowledge required by new employees, replacement, employment.

18. To determine the percentage of women previously trained in vocational areas of education (i.e. 10 to 15 years ago) who are returning to employment.

19. To survey the various occupations to determine those staffed by men and women, by age groups.

20. To develop procedures for determining job opportunities in specific occupational areas.

21. Identification of entry level skills for a variety of selected occupations.

22. To determine the occupational opportunities for the employment of handicapped youth and socioeconomic disadvantaged groups.

23. To analyze available data on employment opportunities to identify emerging occupational trends and future job projections, as a base for planning vocational and technical programs, curricula, and facilities within the state, and teacher training, recruitment and placement.

24. To coordinate selected activities with selected states and exchange information.

25. To develop effective instruments to evaluate the vocational programs in terms of worker performance and effective placement.

RCU CONTINUATION PROPOSAL OBJECTIVES AND ACTIVITIES[2]

A statement of objectives and examples of activities for which the unit will provide leadership and/or coordination is as follows:

1. To collect and disseminate information on employment opportunities, human resources, and educational programs.
    a. Develop techniques and procedures for the collection, classification, summarization or tabulation, storage, retrieval, and dissemination of information on employment opportunities, human resources, and training.
    b. Develop and maintain a directory of manufacturing and non-manufacturing agencies, institutions, and organizations in accordance with the Standard Industrial Classification system.
    c. Conduct a continuous inventory of available data and research on employment, human resources, and training from cooperating institutions, agencies, and organizations.
    d. Disseminate summaries of completed research supported by 4a (ancillary) funds.
2. To stimulate and encourage research on employment opportunities, human resources, and educational programs.
    a. Develop and maintain a file of research personnel in Iowa.
    b. Encourage pre-service and in-service training of research personnel.
    c. Encourage and participate in seminars for graduate students who are interested in research.
    d. Provide consultative assistance to individuals who wish to develop proposals for research, training, experimental, developmental, or pilot projects which may be supported by federal, state, local, or private organization funds.
    e. Develop and publish brochures and articles which relate to RCU activities.
3. To identify issues and problems which require study through research.
    a. Develop a list of potential research problems.
    b. Contact businesses and industries in the state.

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[2] Duration: December 1, 1966 - June 30, 1968

Objectives and Activities (Continued)

   c. Hold conferences with program service area personnel in the Division of Vocational Education.

   d. Follow up board and committee activities to identify issues and problems, e.g., State Board of Public Instruction, State Vocational Advisory Committee, State Area Community College Advisory Committee, and State Committee on Research, Demonstration, and Experimental Programs.

4. To establish and maintain working relationships with agencies, institutions, and organizations which are concerned with employment, human resources, and education.

   a. Develop a directory and classify all cooperating institutions, agencies, and organizations that will participate in occupational research activities in cooperation with the coordinating unit.

   b. Provide information about the educational services which are available through the Division of Vocational Education.

   c. Provide liaison between the Division of Vocational Education and agencies, institutions and organizations, e.g., telephone contacts, correspondence, and conferences.

   d. Encourage and assist in the development of working agreements among state agencies concerned with vocational and technical education.

5. To provide support for line personnel in the Division of Vocational Education.

   a. Assist in the modification of and amendments to the State Plan for Vocational Education.

   b. Assist in the preparation of the annual projected plan of activities and the final report for the Division of Vocational Education.

   c. Assist in the development of standards and guidelines for the operation of area vocational schools or area community colleges in Iowa.

   d. Assist program personnel in the Division of Vocational Education to obtain and analyze data needed for the justification and implementation of new or expanded educational programs.

Objectives and Activities (Continued)

   e. Refer training requests to the appropriate persons in the Division of Vocational Education for implementation.

   f. Keep abreast of current literature and legislation as a basis for serving the information needs of personnel in the Department of Public Instruction.

6. To assist in the planning and development of secondary and post-secondary educational programs, facilities, and staff.

   a. Analyze and project research findings as they pertain to employment opportunities and training needs in agricultural, managerial, clerical, sales, technical, industrial, service, and other occupational areas.

   b. Collect curriculum outlines and related materials.

   c. Gather and analyze information necessary for the clustering of occupations which require similar preparation for employment.

   d. Analyze and project research findings as they pertain to employment opportunities and training needs as a basis for planning teacher training, recruitment, and placement.

7. To assist in the development of a statewide computer-based system of vocational-technical education information.

   a. Modify and adapt report and record forms to the system.

   b. Determine new kinds of information to be gathered, e.g., contact hours, full-time equivalent students.

   c. Develop a technique for disseminating information collected through the system.

8. To assist in the evaluation of vocational and technical education programs.

   a. Utilize occupational research for the continuous evaluation of vocational education offered in the state.

   b. Assist in the development of techniques and instruments for the evaluation of vocational and technical education in Iowa.

9. To promote vocational and technical education.

   a. Participate in conferences and seminars for the furtherance of vocational and technical education techniques and materials.

Objectives and Activities (Continued)

   b. Participate on an individual basis or as members of panels to present materials which relate to RCU activities and vocational and technical education in Iowa.

   c. Assist in the preparation of booklets, brochures, and other media developed by the Division of Vocational Education.

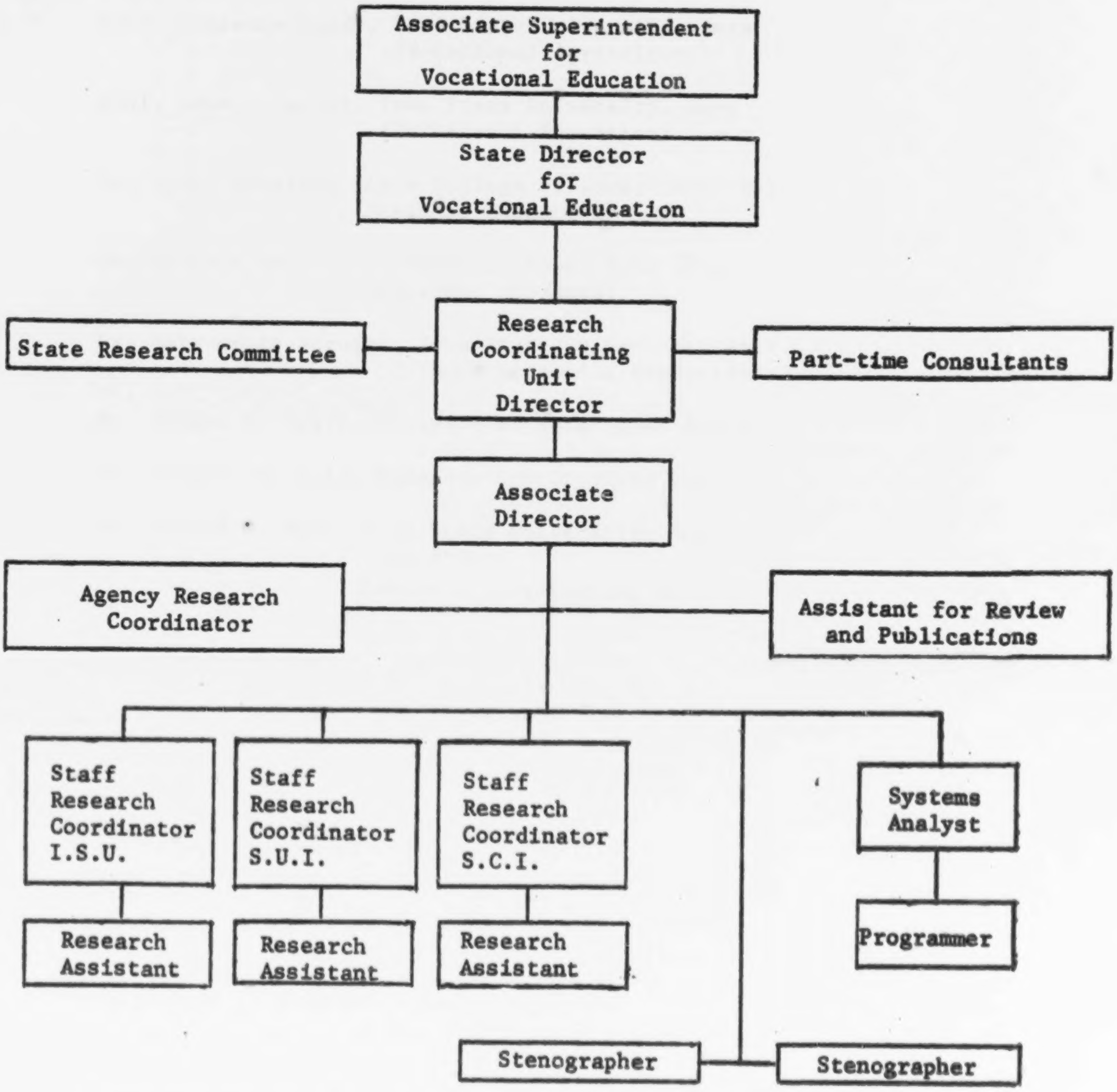
10. To coordinate activities and exchange information with selected states.

   a. Exchange newsletters and brochures.

   b. Distribute progress reports.

   c. Request and distribute, upon request, research information concerning employment opportunities and educational offerings.

RESEARCH COORDINATING UNIT ORGANIZATION CHART[3]


Associate Superintendent for Vocational Education
State Director for Vocational Education
State Research Committee
Research Coordinating Unit Director
Part-time Consultants
Associate Director
Agency Research Coordinator
Assistant for Review and Publications
Staff Research Coordinator I.S.U.
Staff Research Coordinator S.U.I.
Staff Research Coordinator S.C.I.
Systems Analyst
Research Assistant
Research Assistant
Research Assistant
Programmer
Stenographer
Stenographer

---

[3] This was the organization prior to the end of the funded period June 1, 1965 - November 30, 1966

THE STATE COMMITTEE ON RESEARCH, DEMONSTRATION, AND EXPERIMENTAL PROGRAMS

Members are:

Mr. Doyle Carpenter, Division of Vocational Education (ex officio)

Prof. Clarence Bundy, Iowa State University, Ames
(Vocational Agriculture)

Prof. Lowell Carver, Iowa State University, Ames
(Industrial Education)

Dr. Lloyd Douglas, State College of Iowa, Cedar Falls
(Business Education)

Dr. Kenneth Hoyt, University of Iowa, Iowa City
(Vocational Guidance)

Dr. Marguerite Scruggs, Iowa State University, Ames
(Home Economics Education)

Mr. Windol L. Wyatt, Division of Vocational Education

Dr. Kenneth M. Wold, Research Coordinating Unit

Dr. Trevor G. Howe, Iowa State University, Ames
(Education)
Research Coordinating Unit

RESEARCH PROJECTS FUNDED

The State Committee for Research, Demonstration and Experimental Programs recommended and the Director of Vocational Education approved for partial funding under provisions of Section 4(a) of the Vocational Education Act of 1963 these projects:

December 1, 1964 to July 1, 1965

Proposal Number, Initiator & Address	Title	Grant Funds
0 Francis E. Malone, Jr. University of Iowa	*A Study of Students Enrolled in Post-High School Public Vocational Education*	$ 1,893.89
1 Thomas A. Hoerner Iowa State University of Science & Technology	*Factors Related to Employment of Iowa State University Graduates in Agricultural Education*	714.00
2 William F. Bear Iowa State University of Science & Technology	*Influence of High School Vocational Agriculture and the Matriculation, Attrition, Graduation and Employment of Agricultural Engineers Who Attended Iowa State University*	532.20
3 Lloyd V. Douglas State College of Iowa	*The Development of Suitable Shorthand Tapes for Effective Utilization of the EFI Multi-Channel Wireless Shorthand System in Preparing Vocational Office Education Teachers in the Department of Business Education at the State College of Iowa, Cedar Falls, Iowa*	2,760.50
4 Harlan K. Baker Iowa State University of Science & Technology	*A Study of Teachers and Students in the Iowa Area-Technical Electronics Programs, with Implications for a Teacher Education Curriculum in Iowa*	1,280.00

(Continued)

December 1, 1964 to July 1, 1965 (Continued)

Proposal Number, Initiator & Address	Title	Grant Funds
5 Donald P. Lauda Iowa State University of Science & Technology	*Factors Related to the Granting of College-University Credit for Trade and Industrial Experience in Institutions Offering an Industrial Education Curriculum*	$ 640.00
6 Hester Chadderdon Iowa State University of Science & Technology	*Prediction of Success of Graduates of Iowa State University in Teaching Vocational Home Economics*	2,484.00
7 Eleanore L. Kohlmann Iowa State University of Science & Technology	*Personal Values of Family Members and Their Relationship to Satisfying Home Life and Successful Employment*	9,420.00
8 Eleanore L. Kohlmann Iowa State University of Science & Technology	*Bases for Planning Curricula in Homemaking for Junior and Senior High School Pupils in Iowa*	5,050.00
9 Alberta D. Hill Iowa State University of Science & Technology	*Pilot Study of Employment-Oriented Courses in Home Economics for Slow Learners*	3,250.00
	July 1, 1965 Sub Total	$28,024.59
	July 1, 1965 to July 1, 1966	
10 Don R. Sheriff University of Iowa	*A Survey of Employee Selection and Training in Iowa Manufacturing Firms with 100 Employees or More*	$ 6,090.00

(Continued)

July 1, 1965 to July 1, 1966 (Continued)

Proposal Number, Initiator & Address	Title	Grant Funds
11 Proposal Withdrawn		
12 Richard H. Schultz University of Iowa	*A Study of Fifteen Public Post-High School Vocational and Technical Schools in Iowa in 1964-65*	$ 1,060.00
13 Lloyd V. Douglas State College of Iowa	*A Pilot Study of the Feasibility of Incorporating Preparation to Teach "Touch Shorthand" (Stenograph) into the Professional Program for Preparing Secretarial Teachers at the State College of Iowa*	750.00
14 Duane Brown Iowa State University of Science & Technology	*A Survey of Guidance Services in Iowa*	4,780.00
15 Hester Chadderdon Iowa State University of Science & Technology	*Prediction of Success of Graduates of Iowa State University in Teaching Vocational Home Economics (Extension of Project No. 6.)*	645.00
16 Alberta D. Hill Iowa State University of Science & Technology	*Pilot Study of Employment-Oriented Courses in Home Economics for Academically Retarded (Extension of Project No. 9.)*	3,143.00
17 Eleanore L. Kohlmann Iowa State University of Science & Technology	*Personal Values of Family Members and Their Relationship to Satisfying Home Life and Successful Employment (Extension of Project No. 7.)*	8,190.00

(Continued)

July 1, 1965 to July 1, 1966 (Continued)

Proposal Number, Initiator & Address	Title	Grant Funds
18 Eleanore L. Kohlmann Iowa State University of Science & Technology	*Bases for Planning Curricula in Homemaking for Junior and Senior High School Pupils in Iowa (Extension of Project No. 8.)*	$ 6,660.00
19 Irene Beavers Iowa State University of Science & Technology	*Identification of Selected Clusters of Occupations Requiring Similar Home Economics Competencies*	4,308.00
20 Charles P. Havener Iowa State University of Science & Technology	*Part-time Cooperative Industrial Education as Viewed by Cooperating Employers in Ames, Marshalltown and Newton*	770.00
21 Gary Weede Iowa State University of Science & Technology	*Electronic Technician Personnel and Training Needs of Iowa Industries*	2,500.00
22 Elizabeth E. Kerr University of Iowa	*A Study of Practical Nurses Currently Licensed to Practice in Iowa But Not Presently Employed*	2,450.00
23 Harlan Giese Consultant, Trade and Industrial Education	*A Determination of Training Needs for Metalworking Manufacturing Concerns in Iowa*	2,310.00
	July 1, 1966 Sub Total	$43,656.00
	Grand Total	$71,680.59

CONFERENCES AND SEMINARS

Conferences and seminars attended by one or more of the RCU personnel during the eighteen month period include:

Date	Conferences and Seminars	Location
1965		
July	Research Workshop for Research Coordinating Unit Directors	Washington, D.C.
1966		
January	Illinois Research and Development Coordinating Unit Workshop for Vocational Education	Springfield, Illinois
January	Technical Education Conference	Ames, Iowa
February	American Educational Research Association Annual Conference	Chicago, Illinois
January-February	Research Development and Coordination Seminar	Columbus, Ohio
March	Conference on Problems of Occupational Education in the Upper Midwest Region	Minneapolis, Minnesota
March	Iowa Vocational Association Annual Meeting	Newton, Iowa
March	Regional Vocational Education Conference	Kansas City, Missouri
April	Iowa Industrial Education Conference	Ames, Iowa
May	National Vocational Education Research Seminar on Curriculum Evaluation	Champaign-Urbana, Illinois
June	Research in Vocational and Technical Education	Madison, Wisconsin
September	Research Coordinating Unit Directors Conference	Washington, D.C.
September	Trade and Industrial Education Conference	Des Moines, Iowa
September	Polk County Comprehensive Manpower Planning Conference	Des Moines, Iowa

Conferences and Seminars (Continued)

Date 1966	Conferences and Seminars	Location
October	Development of Human Resources	Ames, Iowa
October	Regional Conference for Vocational Education	Kansas City, Missouri
November	Regional Occupational Education Research and Development Planning Conference	Minneapolis, Minnesota

COMMITTEE PARTICIPATION

The major committees on which staff members served during the period were:

Committee participation

1. Program and Functions Committee, Student Characteristics Committee, and Editing Committee of the Iowa Cooperative Study of Post High School Education (Inter-Institutional and DPI)
2. Departmental Standards Committee for Area Schools
3. Strategic Intelligence Unit of Project #5-0045 titled, Interdisciplinary R & D in Vocational and Technical Education Non Metropolitan Areas
4. Joint Committee on Standards (DPI and Board of Regents)
5. Area School Facilities Guidelines Committee
6. State Committee on Research, Demonstration and Experimental Programs
7. Ad-Hoc Interagency Relations Committee (DPI intradepartmental committee)
8. Area School Report Forms Committee
9. Prevocational Centers Committee
10. Manpower and Job Information Committee
11. State Advisory Committee for Vocational Education (ex-officio)
12. Governor's Committee on Manpower (ex officio)
13. Iowa Vocational Association Executive Committee and Legislative Committee (ex officio)

GROUPS CONTACTED

In conjunction with the Research Coordinating Unit objectives, cooperative working relationships have been established and are maintained with the following groups in Iowa. These groups are concerned with activities most closely related to the purposes for which the unit was established and will be continued. Graduate colleges and other cooperating agencies are listed as follows:

Drake University, Des Moines

Iowa State University, Ames
  Center for Industrial Research Services
  Engineering Extension
  Project for Interdisciplinary Research and Development in Vocational and Technical Education in Non-Metropolitan Areas
  University Extension

State College of Iowa, Cedar Falls

University of Iowa, Iowa City
  Bureau of Labor and Management
  Bureau of Business and Economic Research
  Bureau of Educational Research
  Institute of Public Affairs
  Iowa Educational Information Service

Bureau of Apprenticeship and Training, U.S. Department of Labor
Iowa Development Commission
Iowa Employment Security Commission
Iowa State Manpower Development Council
Office of Economic Opportunity
Vocational Rehabilitation Division

Other contacts have been made and will be maintained with institutions, agencies, business and industrial organizations throughout Iowa to accomplish the activities of the Research Coordinating Unit. The following have been contacted:[4]

AAA Motor Club of Iowa
ABC Publishing Company
American Institute of Business
American Motor Hotel Association of Iowa
American Society of Composers, Authors & Publishers
Americana Academy of Beauty

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[4] Groups with which substantial contact have been made are starred*

Groups Contacted (Continued)

Asphalt Paving Association of Iowa
Associated General Contractors of Iowa
Associated Grocers Wholesale Coop., Inc.
Des Moines Association of Insurance Agents
Des Moines Construction Council
Des Moines - City offices: City Planning and Zoning Commission
    Council of Social Agencies
    Public Library
Electrical Contractors Association
*Greater Des Moines Chamber of Commerce
*Independent Garage Owners of Iowa
International Brotherhood of Electrical Workers, Local 499
International Union Operating Engineers, Local 234 and 268
Iowa Association of Chiefs of Police & Police Officers, Inc.
Iowa Association of Consulting Engineers
Iowa Association of Electrical Cooperatives
*Iowa Association of Life Underwriters
*Iowa Association of Plumbing, Heating, and Cooling Contractors, Inc.
Iowa Association of Private Colleges & Universities
Iowa Auto Dealers Association
Iowa Bankers Association
Iowa Barber College
Iowa Concrete Paving Association
Iowa Council of Churches
Iowa Daily Press Association
Iowa Dairy Foods Association
Iowa Engineering Society
Iowa Farmers Union
*Iowa Federation of Labor, AFL-CIO
Iowa Grain and Feed Association
Iowa Hotel and Motor Inn Association
Iowa Independent Oil Jobbers Association, Inc.
Iowa Lumbermens Association
Iowa Manufacturer's Association
Iowa Medical Society
Iowa Motor Truck Association, Inc.
*Iowa Nursing Home Association
Iowa Petroleum Committee
Iowa Power & Light Company
Iowa Press Association
Iowa Real Estate Association
Iowa Restaurant Association
Iowa Retail Farm Equipment Association
Iowa Retail Food Dealers Association
Iowa Retail Hardware Association
Iowa State Bar Association

Groups Contacted (Continued)

- Iowa State Offices:
  - *Aeronautics Commission
  - *Agriculture Department
    - Weights and Measures Division
  - Banking Commission
  - Board of Social Welfare
  - *Commerce Commission
    - Motor Transportation Division
    - Utilities Division
  - Health Department
    - Barber Division
    - Cosmetology Division
    - Hospital Services Division
    - *Vital Statistics
  - *Insurance Department
  - Mining Commission
  - Real Estate Commission
  - *Tax Commission
    - Sales and Use Tax
  - *Traveling Library
- Iowa State Education Association
- *Master Builders of Iowa
- Metropolitan Insurance Company
- Midland Book Sellers Association
- National Brotherhood of Packinghouse & Dairy Workers Labor Organization
- North Central Compensation Rating Bureau
- Northern Natural Gas Company
- Northwestern Bell Telephone Company
- *Register & Tribune
- Retail Grocers Association
- St. Paul Insurance Companies
- Sioux City Construction League
- U.S. Department of Agriculture, Market News Branch
- U.S. Department of Army, Lower Mississippi Valley Division
- U.S. Department of Commerce

OCCUPATIONAL SURVEYS

RCU staff participated in planning, conducting, and completing occupational surveys of the membership of the following associations:

Master Builders of Iowa

Iowa Retail Lumbermens Association

The RCU staff met with personnel of the Division of Vocational Education and with representatives of these groups to discuss the possibilities of conducting occupational surveys to assess manpower needs for which training programs should be established:

Iowa Automobile Dealers Association

Independent Garage Owners of Iowa

Associated General Contractors of Iowa

Home Builders of Iowa

Iowa Association of Plumbing, Heating, and Cooling Contractors

TRAINING REFERRALS

RCU staff contacts with personnel of the following organizations revealed interest in establishing training programs to meet manpower needs. Referrals of this interest were made to the line personnel in the Division of Vocational Education for further discussion and implementation.

Iowa Automobile Dealers Association

Independent Garage Owners of Iowa

Master Builders of Iowa

Iowa Farmers Union

Iowa Retail Lumbermens Association

Iowa Motor Truck Association, Inc.

Iowa Association of Electric Cooperatives

Iowa Association of Plumbing, Heating, and Cooling Contractors

Iowa State Association of Life Underwriters

REFERENCE FILE
(File System)

- AREA SCHOOLS
  - General
  - Community College Materials

- AREA SCHOOLS
  - Curriculums now being offered in neighboring states:
    Illinois, Kansas, Minnesota, Missouri, Montana, Nebraska, South Dakota, and Wisconsin
  - Iowa Area Vocational Schools

- POST HIGH SCHOOL AND COLLEGE CATALOGS - U.S. (various states)

- U.S. DEPARTMENT OF LABOR - APPRENTICESHIP MDTA

- AGRICULTURE
  - Curriculums

- CURRICULUMS AND COURSES
  - Curriculum Development References
  - Curriculum Material Sources
  - Supplementary Course Outlines

- SPECIFIC CURRICULUMS

- INSTRUCTIONAL MATERIALS

- LEGISLATION

- OCCUPATIONAL INFORMATION
  - SIC Directory

- CAREER INFORMATION

- OCCUPATIONAL INFORMATION

- JOB GUIDES

- CONFERENCE REPORTS

- TECHNICAL SOCIETIES

- PERIODICALS

- RESEARCH
  - Abstracts and Annotations
  - Administration
  - Bibliographies
  - Census Data

Reference File (Continued)

RESEARCH (Cont)
- Curriculum
- Educational Programs
- Employment Opportunities
- Evaluation
- Facilities
- Follow up
- 4(a)
- 4(c)
- Funds, sources
- Guidelines and priorities
- Guidance and Counseling
- Historical Studies
- Learning Process
- Manpower Needs
- Occupations (jobs)
- Organizations, Research
- Personnel, Research
- Research Method
- Philosophy and Objectives
- Potential Research Areas
- Special Needs
- Students, Characteristics
- Teacher Education
- Teaching Methods
- Other

STATE VOCATIONAL EDUCATION MATERIALS

U.S. VOCATIONAL EDUCATION MATERIALS

RCU's - OTHER STATES

UPJOHN INSTITUTE

U.S. DEPARTMENT OF LABOR

RECORD OF MATERIAL DISTRIBUTED THROUGH THE IOWA RCU

No. of Copies	Title and Author	Sent to
5,000	Research Coordinating Unit Brochure: Planning Today's Educational Programs for Tomorrow's World of Work Through Occupational Research	DPI Staff Vocational Directors Deans of Junior Colleges Chambers of Commerce State Agencies Adult Education Directors Research personnel at state institutions 1200 members of Iowa Manufacturers Assn. Other RCU's Interested groups at various meetings

Abstracts

No. of Copies	Title and Author	Sent to
500	Abstracts and copies of Masters degree thesis: A Study of Fifteen Public Post-High School Vocational and Technical High Schools in Iowa During the 1964-1965 School Year by Richard H. Schultz, State University of Iowa, Iowa City	Vocational counselors Libraries at state institutions Research personnel at universities
10	Indexes and Abstracts of Research Completed in the Field of Agricultural Education from 1951-1965 at Iowa State University by William M. Frelund	Libraries at state institutions Centers at Madison and Columbus

Area School Material

No. of Copies	Title and Author	Sent to
200	Maps of merged areas for area schools in Iowa with locations of Iowa State Employment Service Offices	Iowa State Employment Service personnel Area School Administrators
50	Mailing lists of officials of Iowa Chambers of Commerce and of Iowa Development Groups according to Area School Districts	Area School Administrators
13	Area Vocational School Standards by substandards committee	Division of Vocational Education staff chiefs

Material Distributed (Continued)

No. or Copies	Title and Author	Sent to
	Reprints	
1,065	Reprint from Los Angeles Times: Dropout Remedy--Expanded Vocational Education by Richard Reynolds	Division of Vocational Education and Department of Public Instruction Staff Department of Public Instruction State Board Advisory Council members Section chiefs mailed copies to state personnel
10	Reprint of paper: Manpower and Labor Economics by Howard Rosen at a seminar	Division of Vocational Education professional staff
50	Editorial reprint: "How Fares the Vocational Graduate" from School Shop magazine	Division of Vocational Education professional staff, Area School administrators
75	Reprints: Research Needs in Vocational-Technical Education for Program and Career Planning by Walter Arnold and David Bushnell	Division of Vocational Education professional staff
75	Guidelines and 1967 Priorities for Vocational and Technical Education Summer Training Programs (Guidelines supplement) Division of Adult and Vocational Research by David Bushnell	Area School Personnel
	Articles	
40	Iowa Business Digest, October 1966, published by State University of Iowa, Iowa City, contained article on area schools by Dr. Trevor G. Howe, RCU, entitled, "Iowa's Area Vocational Schools and Area Community Colleges." Issue was distributed at a conference on Human Resources Development held at Iowa State University, Ames, October, 1966.	Division of Vocational Education Boards and Department of Public Instruction Staff

Material Distributed (Continued)

No. of Copies	Title and Author	Sent to
	Articles (Cont)	
100	Midland Schools, magazine, Iowa State Education Association publication, Des Moines, May-June, 1966: "Progress on Iowa's Area Vocational Schools and Area Community Colleges," by Dr. Trevor G. Howe, RCU	Division of Vocational Education Boards and Department of Public Instruction Staff
4,500	Cedar Rapids Chamber of Commerce publication, Cedar Rapids Today, featured an article on "Iowa's Area Vocational Schools and Area Community Colleges" by Dr. Trevor G. Howe, RCU, in the November 1966 issue	High School seniors in Merged Area X Community College, Cedar Rapids, which includes the following counties: Linn, Benton, Jones, Iowa, Johnson, Cedar, and Washington
	Division of Vocational Education	
30	Summary List of Division of Adult and Vocational Research Funded Projects Fiscal Year 1966	State Chiefs Interested personnel
	Occupations	
50	Vocational Ornamental Horticulture N.Y. State Department of Education	Division of Vocational Education staff
750	Chemical Technician booklet by Manufacturing Chemists' Association, Inc.	Guidance personnel Area School Administrators Trade & Industrial Directors & Coordinators
	Newsletter	
Iowa	Iowa Vocational Association Newsletter, October, 1966, two articles: opening of new area schools and an appeal to vocational teachers to submit ideas for action research of grassroots problems.	Iowa vocational teachers

RCU EVALUATION SURVEY

The Iowa Research Coordinating Unit has many spheres of activity, encompassing external and internal aspects of vocational education. To assess the value of RCU activities, individuals in the Department of Public Instruction received a questionnaire. Answers to the six questions formed an evaluation by that person of the RCU activities as they had touched him in his job. The candid comments were typed by the respondents and no identification of personnel was recorded. The question is posed first, followed by the individuals' answers in their own words, without RCU editing. Answers between asterisks are from one respondent.

1. As evidenced by what you have observed and your understanding, what do you feel are the functions of the Research Coordinating Unit in the Division of Vocational Education? Please be specific in terms of an action.

* * *

Provide leadership in stimulating and initiating occupational research for the entire state.

Determine needed research and coordinate research efforts. Provide leadership in the development of evaluation and instruments to assess the value of occupational programs and to stimulate follow-up of trainees over an extended period.

Collect and distribute occupational information helpful in determining employment needs and opportunities.

Project occupational needs to help in planning programs for training and retraining.

Provide information on occupational research.

* * *

Collecting of data. Advisers to those doing research. Dissemination of collected data.

* * *

Compile reports for USOE.

Work with trade associations, organized labor, employment service, and section chiefs in identifying labor market needs.

Perform some public relations work; speeches, dissemination of pamphlets.

Establishing Standards for Area Schools.

* * *

RCU Evaluation Survey (Continued)

Research

Information Retrieval and Dissemination.

Evaluation of Proposals.

* * *

Assist Area Schools in determining the development of occupational needs for setting up courses. Assist in preventing duplication of courses in Area Schools, or at least assist in controlling course development.

To instigate and motivate follow-up on trainees trained in Area Schools.

* * *

Secure facts and materials to provide sound information on the course for vocational education. Provide information which will assist in coordinating the effort of the various services.

* * *

Coordinate research being initiated and conducted in the field of education. Primary responsibility is in but not limited to the vocational areas of education. Coordination embodies: assistance in developing proposals, review of proposals, and recommendation or avenues of financial support of proposals.

Provide review, abstracts and interpretation of research being initiated and already conducted.

Serve as resource body regarding needed research areas, research initiated, and research conducted.

* * *

To ferret out and distribute helpful information concerning needs for occupational education, the existence of such educational programs, the feasibility of new ones, and to suggest action by Area Boards.

* * *

To study and disseminate information about vocational assignments, openings and training, and the availability of personnel to fill the positions. These studies, of course, would take a critical look at the training and educational programs afforded the present labor force as well as projections of what will be needed in the future. The RCU would not only conduct studies on its own but would also coordinate research efforts of interest to all types of vocational groups.

* * * * *

2. From your point of view what should be the functions of the RCU in the Division of Vocational Education? Please be specific in terms of an action.

* * *

In addition to my answer to Question 1, conduct a comprehensive survey of occupational needs in Iowa that will provide valid justification for programs.

Conduct surveys and action research to provide needed information which sophisticated studies fail to provide.

* * *

More contact with professional researchers in terms of approving research which section chiefs feel is important rather than approving research projects which the researchers, who are outside of vocational education, think are important.

More contact, coordinated with section chiefs, with graduated classes to promote meaningful research.

Hire sufficient staff so that a greater amount of less sophisticated research could be accomplished by "in house staff" with trade associations, labor and Employment Service.

* * *

Collection and dissemination of data. Advice to those doing research, aid to the vocational section with data.

* * *

Research

Information Retrieval and Dissemination of vocational education related information, and of information on resources for organizing information or of doing research.

Construction of research projects within Vocational Education.

Evaluation of research projects within Vocational Education.

* * *

Assist in coordinating the different sections in the Division of Vocational Education through research and development.

Work closely with the Division coordinator. (When one is hired.)

Assist the integration of Division sections.

Research the best methods and aspects of each section and attempt to integrate these into all sections. Such as: (1) type of training, (2) length of training, and (3) structure in clusters to meet all levels of need and intelligence.

* * *

Secure basic facts on industry, agriculture and other facets of the economy as to their importance in a training program.

Provide factual information on the number of students graduating from college out of our high school classes.

* * *

Coordination of research in the vocational areas of education. The Unit should limit its activity to the leadership in developing research activities, services on research activity, and the assessment of research activities.

The RCU's primary responsibility should be the coordination of research within vocational education, but its sphere of operation and limits of operation should not be limited to the Department of Public Instruction or the State of Iowa.

* * *

Statewide surveys by area of:

(1) Vocational-Technical education needs

(2) Vocational-Technical education curriculum distribution

(3) Geographic availability of occupational education for college age people, those above college age, and those employed and limited as to travel.

* * *

As I see the Unit it could best serve as :

(1) A clearinghouse for vocational research to avoid duplication of effort

(2) Conduct research for other groups interested in the vocational pictures in Iowa

(3) Carry on research studies of its own and those suggested by the various sections in the Vocational Education Division

(4) A service agency to supply information to all sections in the Department.

* * * * *

3. What activities carried out by the RCU have assisted you in carrying out the functions of your own position? Please list specific examples of such assistance.

* * *

Development of bibliographies, and summaries of employment opportunities and needs.

* * *

Labor market need surveys: Iowa Auto Dealers Association. Independent Garage Owners. Iowa Lumber Dealers Association. Master Builders, Home Builders, Employment Service. Iowa Plumbing, Heating, Cooling Contractors Association. "Bugging" us about our supplement to the Descriptive Report. Considerable help on thesis questionnaires.

* * *

Aid to people in our field in writing proposals for research, dissemination of data necessary to the operation of this section.

Surveys for planning for the future programs.

* * *

Acquired and organized data on occupational needs in Iowa.

Proposed guidelines.

Forwarded bulletins, etc., over my desk.

* * *

None

* * *

None

* * *

Coordination of information not a specific function, considered the responsibility, but carried out due to necessity.

Initiation and compilation of information on training needs and demand occupations.

Developed contacts with other agencies which stimulated development of research, group planning meeting, occupational information seminars, and agreements.

* * *

We haven't had time to evaluate our own situation.

* * *

The RCU has not made any information available to our Division so I cannot see that it has contributed significantly to my division's work. We have been able to coordinate our data collection efforts with the Units and have, therefore, avoided duplication of information requests going to local school districts. The Unit has used some of our data in its work, and since we are a service Division we appreciate knowing our data is being used.

* * * * *

4. To be of most assistance to you in fulfilling your functions, on what activities should the RCU place emphasis during the coming year?

* * *

Help develop evaluation and follow-up studies for total program. Develop a list of definitions. Develop criteria for determining location and number of area school programs.

Determine needs and interests of students as well as specific needs for occupational training, not just generalities.

Collect a comprehensive file of occupational resource material available to all services; i.e., questionnaires, application forms, work experience score cards, follow-up report forms, as well as resource materials to develop curriculum. Build on materials already available in the sections.

* * *

Identification of labor market demands. Promotion of research on curriculum. Assistance on methods of conducting follow-up studies--forms, procedures, methods, etc. Cutting red tape on obtaining information stores through computers.

* * *

No change of emphasis from the present operation.

* * *

Acquiring a good occupational survey throughout the state.

Evaluating effectiveness of vocational programs.

Acquiring "guides" from other states, recommending procedures.

* * *

Survey of occupational needs. Follow-up. Assist in section coordination and integration. Research on instructor securement and success.

* * *

Information to back up the cause of good education for all Iowa people, not just a few.

* * *

A. Coordinate research which would:

    (1) Identify and clarify demand occupations on a statewide basis.

    (2) Identify and clarify training need areas on statewide basis.

    (3) Develop a guideline for local agency assessment of demand occupations and training needs.

    (4) Identify individual assessment criteria for selection, appraisal and placement.

(5) Develop evaluation techniques appropriate for vocational areas of education.

B. Summarize and/or abstract research related to specific service area on a systematic basis. Should not be limited to Division, Department, or Iowa. Priority should be given in that order.

C. Stimulate and offer guidance to each service area (in cooperation with teacher preparation institutions) on the initiation, development, conducting, and interpretation of research in the Division of Vocational Education, Department of Public Instruction, and in the field (the local agency or school setting).

* * *

Guidance in our area. Vocational-technical-occupational education needs.

A. Federally reimbursable

B. Those that are not

Feasibility of curriculums

A. Fulltime

B. Supplemental

How-to-do-it Guidelines.

* * *

The RCU could be of most assistance to us in our functions by:

(1) Studying their data needs to be supplied by local school districts and cutting out as much duplication of effort as possible

(2) Informing all levels of education and government of the data available through the Unit

(3) Making an effort to supply data to the Vocational Education Division peculiar to that Division

(4) Analyzing and interpreting the data coming in on the new VEIS data system

(5) Assisting in the coordination of research efforts among interested groups in the state.

* * *

5. What RCU contributions would you list as being the two most significant? These may relate to your section, the division, the Department of Public Instruction, etc. Use your own frame of reference. Place the more important activity first.

* * *

Up-graded activities of division. Relieved section of research responsibilities.

Provided status for division.

* * *

Could not pick one most important as the RCU unit does and should tie into the operation of the section and department.

* * *

Procedures, methods, devices for follow-up studies.

Identification of labor market needs cooperatively.

* * *

Organization of occupational data. Screening and forwarding information.

* * *

What implementation has been made of what you have researched?

What communications have been made to other sections on your work and research?

* * *

We want information of a sound and practical nature. No history writing.

Need information on educational levels of Iowa population.

* * *

Identification of industries, agencies, employers, and training programs.

An assessment of demand occupation areas and training needs.

* * *

RCU Evaluation Survey (Continued)

Practical research and survey. Summaries and consensi. Disseminating information already available.

* * *

For the Department as a whole the RCU has:

(1) Furnished information about certain vocational opportunities not available elsewhere.

(2) Brought together groups of people with common interests who previously had gone their separate ways.

* * *

6. What are the two most serious shortcomings of the RCU? Place the more serious shortcoming first.

* * *

Not enough funds. Spend too much time assuming some of administrative responsibilities for state director at expense of RCU functions. (Need an assistant director) Have not conducted comprehensive surveys or studies of any type at the state level.

* * *

No shortcomings have been evident in RCU operation to me.

* * *

Stay out of establishing standards for area schools, or be a good conference leader and carry the recommendations of the group to "top brass," or if you have the authority to proceed with your own opinions, and plan to do so, then do not waste our time in lengthy meetings on this subject.

Present staff involvement in many activities to the detriment of the research activities.

* * *

Newness, not yet organized to come up with "the answers" to the extent desired.

Turnover, RCU loses effectiveness and possible continuity.

* * *

Make use of what has been accomplished in the past year. Plan ahead.

* * *

We know of no serious shortcomings. There must be care in the selection of research material to be sure it is of a sound and practical nature.

* * *

Has been charged with a responsibility without authority or support to discharge that responsibility through decisions made within that staff.

Facilities and financial support.

* * *

Lack heretofore of fulltime director; attracting and keeping personnel; clearer definition of role; lethargy of other agencies.

* * *

The Unit has not succeeded to the extent it should in making people aware of its presence or its mission.

The results of its accomplishments have not received adequate attention.

* * * * *

MEMORANDUM

TO: Mr. Doyle Carpenter
Mr. Windol Wyatt

December 8, 1966

FROM: RCU Staff

On the attached sheet, you will find a list of forty-seven activities which comprise the work of the RCU for the period June 1, 1965, through November 30, 1966. As a part of our RCU final evaluation report, we want from the two of you, as heads of our Division, a rating of the importance of each of these activities in terms of the philosophy and stated purposes of federal legislation for vocational and technical education.

The rating scale to apply is as follows:

1 - of little importance
2 - important
3 - very important

We desire one rating which reflects your combined thinking regarding each activity.

Please place the appropriate figure from the above scale in front of each activity listed on the attached sheet.

MEMORANDUM December 12, 1966

TO: Mr. Doyle Carpenter, Associate Superintendent
Mr. Windol Wyatt, Director
Division of Vocational Education

FROM: Research Coordinating Unit

SUBJECT: RCU final evaluation report which is required as a part of the funding contract with the U.S. Office of Education.

May we obtain a statement for our final evaluation report relative to the impact of the RCU on vocational and technical education in Iowa? We feel this statement should reflect contributions and shortcomings and positive and negative aspects. Perhaps some consideration can be given to items being accomplished now that may not have been accomplished if the RCU had not been established.

While such a statement should most appropriately be provided by the two of you, consideration might be given to obtaining additional responses for such a statement from Mr. Johnston or an individual of his choice relative to reflections from a more general point of view.

We are not looking for bouquets to make a good impression or to build a case. We want a review which is based on a hard-nosed approach. Our objective is to obtain a critical review to add to our report; however, we are most interested in the review from the point of view of improving the operation of the RCU in the coming months.

Thank you for your help in this regard.

State of Iowa
Department of Public Instruction
217 - SEVENTH STREET
Des Moines, Iowa 50309

PAUL F. JOHNSTON
SUPERINTENDENT

W. T. EDGREN
ASSISTANT SUPERINTENDENT
ADMINISTRATION

DAVID H. BECHTEL
ADMINISTRATIVE ASSISTANT

L. N. JENSEN
ASSISTANT SUPERINTENDENT
INSTRUCTION

December 9, 1966

Dr. Marguerite Scruggs
Head, Home Economics Education Department
Iowa State University
Ames, Iowa 50010

Dear Dr. Scruggs:

The Research Coordinating Unit (RCU) of the Division of Vocational Education, Department of Public Instruction has been in operation for a period of eighteen months. The Unit was funded with federal monies under provisions of the Vocational Education Act of 1963 and with matching state monies. A proposal to continue the RCU through June 30, 1968 has been approved.

The staff of the RCU is currently preparing a final report of the Unit's activities during the first eighteen months. In addition to a description of activities we are soliciting and will include in the report evaluative ratings and comments from several sources which will help indicate the strengths and weaknesses of the Unit's operation. These evaluative items will also be helpful in guiding the future activities of the Unit.

Your personal observations and comments will be most helpful and greatly appreciated. Would you, therefore, prepare a statement in letter form, based on your contacts with and observation and understanding of the RCU operations, which could be included in the RCU final report? We realize that you are probably not familiar with everything the RCU does. This is unimportant. What is important is whether or not RCU operations have touched on activities you deem important to the process of improving vocational education as it relates to the world of work. We are not after bouquets, but straight-from-the-shoulder comments on strengths and weaknesses in the RCU effort as you know them. We are just as interested in knowing what is yet to be accomplished as in what may have been accomplished.

A response at your earliest convenience is needed. Our final report is due in Washington by January 1. Thank you for assisting us in this way.

Very truly yours,

Kenneth M. Wold, Director, RCU

Donald G. Green, RCU

KMW:DGG/jc

IOWA DEVELOPMENT COMMISSION

GOVERNOR: HAROLD E. HUGHES
DIRECTOR: CARROLL E. WORLAN

250 JEWETT BUILDING
DES MOINES, IOWA 50309
TELEPHONE 282-0231
AREA CODE 515

December 21, 1966

Mr. Kenneth M. Wold, Director
Research Coordinating Unit
Division of Vocational Education
Department of Public Instruction
217 Seventh Street
Des Moines, Iowa

Dear Mr. Wold:

Some of us on the staff here very definitely feel the Research Coordinating Unit can contribute a great deal in helping shape the role of the merged area vocational schools and area community colleges by identifying vocational training problems, i.e., matching people with skills, to industry and company needs for skills.

Other programs can be developed to be of help in training and retraining people in terms of industry needs based on various projections.

As you know, some meetings have been conducted to discuss these and other matters pertinent to state-wide industrial development vis-a-vis vocational training and it seems that more study could be given to this problem in order to clearly define it and suggest ways of doing something to meet it through the development of needed curricula.

We would appreciate a copy of your total report, if at all possible.

Cordially,

William W. Brown
Assistant to the Director

WWB/er

CHAIRMAN: [illegible], Carroll / VICE CHAIRMAN: MARVIN M. SCHMIDT, Des Moines / SENATOR ANDREW G. FROMMELT, Dubuque / HUGH H. HANNAH, Dave
[illegible] HAYES, Mt. Pleasant / REPRESENTATIVE AL MEACHAM, Grinnell / JOHN J. MURRAY, Fort Dodge / ARTHUR SANFORD, Sioux City
SENATOR JACK SCHROEDER, Bettendorf / REPRESENTATIVE VINCE STEFFEN, New Hampton / JOHN P. TINLEY, Shenandoah

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY
Ames, Iowa 50010

DEPARTMENT OF EDUCATION

December 28, 1966

Dr. Kenneth M. Wold, Director
Research Coordinating Unit
Department of Public Instruction
217 7th Street
Des Moines, Iowa 50309

Dear Dr. Wold:

I am sorry I am late in answering your letter of December 9. As you may know, I was on vacation for three weeks and just got back in the office.

In regard to the Research Coordinating Unit of the Division of Vocational Education, Department of Public Instruction, I would have to make my comments entirely on the basis of my contacts with Dr. Howe while he was in that position and serving on the research committee. My contact on the research committee has been a very satisfying experience. It has seemed to me that this has offered us an opportunity to do a number of things that were not possible otherwise. We here at Iowa state in industrial education have been able to guide some of our graduate students into studies that would make a contribution to vocational education. To this date, only one of these has been completed and a summary prepared, but a number of others have been approved and will be completed in the near future. Summaries of these will be available to your office and others soon.

Speaking entirely from the standpoint of my contact and position on the committee, I would say that the RCU has rendered a real service to vocational education in our state, and, as time goes on, will continue to do so. My contacts with your office in handling the matters that have come to us have been well handled in a business-like way. In fact, I am amazed at the amount of work your organization has been able to do in the short time it has been organized. I compliment you upon your achievements. I only hope your work can continue and there will be funds to support this activity.

Sincerely yours,

Lowell L. Carver

Lowell L. Carver, Chairman
Industrial Education Curriculum
202 Industrial Education Building

LLC:cj

IOWA
EMPLOYMENT SECURITY COMMISSION
IOWA STATE EMPLOYMENT SERVICE
UNEMPLOYMENT INSURANCE SERVICE
1000 EAST GRAND AVENUE • DES MOINES 50319

COMMISSIONERS
HENRY E. CARTER, CHAIRMAN
ROSS M. CARRELL
J. W. JANSSEN

HAROLD E. HUGHES, GOVERNOR

December 20, 1966

Refer to: 9ESP

Dr. Kenneth Wold, Director
Research Coordinating Unit
Department of Public Instruction
Division of Vocational Education
Sixth Floor, Davidson Building
Seventh & Walnut Streets
Des Moines, Iowa

Dear Dr. Wold:

In response to your letter of December 9, 1966, requesting our evaluation of the Research Coordinating Unit, the following comments are presented:

I. Introduction
All remarks will be limited to our agency's experience with your organization. We will make no attempt to evaluate other phases of your activities.

II. Strengths
A. In all of our associations, the R.C.U. has been most cooperative in mutual planning and attempting to work together in accomplishing common goals.

B. The Unit has performed very competently in acquiring first hand knowledge of all existing sources of occupational information, as well as keeping up-to-date on current and planned research.

C. Special commendation should be awarded for the competence of R.C.U. personnel in ferreting out possible sources of occupational information and in establishing solid lines of communication between these sources and the Unit.

D. The Unit has been very effective in cooperating with M.D.T.A. and other manpower programs in which the Employment Service is involved.

III. Suggestions for Improvement

A. The only partially critical comment we could make pertains to our disappointment that plans for a joint Job Market Information Committee--composed of members from the Employment Service, Vocational Education and other manpower related agencies did not materialize. It is our feeling that such a committee could provide coordination and direction to existing occupational research activities, as well as planning further needed research.

B. While the Unit has been most diligent in discovering occupational research activities, little has been accomplished in disseminating or sharing this information with other participating agencies. Original plans called for the establishment of one central depository of occupational information which would be accessible to all interested parties, but this has not been accomplished although it is still a most worthwhile goal.

IV. Summary

In the comparatively brief period of its existence, the Research Coordination Unit has firmly established itself as a valuable adjunct to the Vocational Education Department. They have established basically sound relationships with all agencies and organizations involved with manpower activities, and have cooperated in practically all of the occupational research activities being conducted in the State.

While many attainable goals remain unrealized, continued efforts based on past accomplishments should result in the attaining of most of the essential objectives.

Very truly yours,

Jerome W. Corbett

Jerome W. Corbett, Director
Employment Service Division

GNL:ke

STATE COLLEGE OF IOWA
CEDAR FALLS
50613

**DEPARTMENT OF BUSINESS AND
BUSINESS EDUCATION
AREA 319—266-1721**

December 13, 1966

Dr. Kenneth M. Wold
Department of Public Instruction
217 Seventh Street
Des Moines, Iowa 50319

Dear Dr. Wold

In my judgment, the Iowa RCU already is materially contributing to vocational education in Iowa and is in position to perform much-needed and important services for us in the future.

Specifically, I have the feeling that its assistance in coordinating and advising the task of helping to fund appropriate research projects has special strength in encouraging currently needed and more practical types of research; my own impressions are that far too much emphasis has been given on the national level to "long range" and more "basic" type of research. While both are important and needed, those of us "on the firing line" know that we cannot afford to wait years before solving today's immediate problems!

Also, in my nearly thirty years of service on my present position helping to prepare vocational teachers our RCU has provided me with the first opportunity to participate in actually bringing together representatives of all vocational teacher-education areas "monthly." This coordination of our thinking and our activities, although limited to research considerations, promised to be a most important step in much better eventual coordination of all our efforts.

Certainly, too, present efforts to accumulate in one place information about pertinent research completed in Iowa in the past promises to provide us soon with much-needed availability of information; all vocational teacher education work is hampered when such information is not readily available.

I am not close to the total objectives and planning of the RCU, but I would rather hope that sometime in the near future it might play an important leadership role in helping to "motivate" needed research throughout various vocational educational groups in Iowa. We need some such a group possessing an over-all-viewpoint that can point out to all of us certain important areas needing research--and perhaps at times to make pertinent suggestions about potential methods of attack on the problems needing to be solved.

Dr. Kenneth M. Wold
Page 2
December 13, 1966

Thus, all told I personally am very glad that Iowa does have this excellent start and am certainly hoping that this good work will improve in its ability to reach out more into the vocational education of all of Iowa.

Sincerely

Lloyd Douglas

Lloyd V. Douglas, Head
Member Research Advisory Committee

LVD:cp

IOWA STATE UNIVERSITY
of Science and Technology
AMES, IOWA 50010

Department of Economics ~~and Sociology~~

December 13, 1966

Mr. Kenneth M. Wold, Director
Research Coordinating Unit
Department of Public Instruction
217 Seventh Street
Des Moines, Iowa 50309

Dear Mr. Wold:

This is in response to your letter of December 9th, requesting my evaluation of the work of the RCU during the past 18 months.

As Director of the Iowa State Manpower Development Council from July 15, 1965 to August 31, 1966, I have as you know, worked almost on a day-by-day basis with the staff of the RCU. This close relationship has continued since my return to Iowa State University.

In general, the RCU has filled its role ably and efficiently in relation to numerous projects that have involved the Manpower Development Council, and later, the Industrial Relations Center at Iowa State University.

Specifically, I have found the RCU to be particularly helpful in formulating a pilot-feasibility study for a comprehensive research program in Health Manpower, and also in our current multi-agency cooperative program for developing better occupational employment for Iowa's emerging area-vocational schools.

Any weakness that I might identify would be primarily related to the newness of the RCU in Iowa. Over time your mission will be known to a wide audience in the state and your present effectiveness will be emerged.

My best wishes for the next 18 months.

Sincerely,

Edward B. Jakubauskas

Edward B. Jakubauskas
Professor of Economics
and formerly,
Director of the Iowa State Manpower Development Council

EBJ:ac

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY
Ames, Iowa 50010

COLLEGE OF HOME ECONOMICS
OFFICE OF THE DEAN

January 4, 1967

Dr. Kenneth M. Wold, Director
Research Coordinating Unit
Department of Public Instruction
Division of Vocational Education
217 - Seventh Street
Des Moines, Iowa 50319

Dear Dr. Wold:

The Research Coordinating Unit of the Division of Vocational Education, Department of Public Instruction is to be commended for the progress that has been made within the eighteen months of its existence and as reported in the periodic progress reports. Most of my knowledge of the functioning of the Research Coordinating Unit comes from participation on the State Committee on Research, Demonstration, and Experimental Programs and a review of the Progress Reports.

The functioning of the State Committee on Research, Demonstration, and Experimental programs has facilitated expansion and strengthing of research in Vocational and Technical Education in Iowa, and increased understanding of the resources and needs in research in the existing services of Vocational Education, and the cooperative consideration of research plans and needs on the part of represenatives from the different Universities, fields of Vocational Education, and Department of Public Instruction. Through the Research Coordinating Unit and especially, in relation to research, the State Committee on Research, Demonstration, and Experimental Programs we need to assume more leadership in idenitifying problems of high priority in all of Vocational Education and design research efforts involving the various aspects of Vocational Education. I am referring to coordinated planning and carrying out of research that would be interinstitutional and interservice as well as interdisciplinarly in nature that would contribute to the solving of major problems of concern to all of Vocational Education. Such research would not take the place of research underway in the various services or aspects of Vocational Education but would supplement these efforts.

It is understandable in these early months of the development and operation of a Research Cooridnating Unit that the dissemination of information and provision for accessability of information to the many individuals and groups involved in Vocational Education need further development. For example, I do not believe that all teacher educators and research personnel appreciate the potential assistance available to them through the Research Coordinating Unit

I believe that one important question to be answered is what guide lines are to be used in determining who can most effectively conduct what types of research in Iowa? What contributions or functions can teachers, State Consultants, Teacher Educators, Research Personnel most effectively perform in a constructive Research Program in Vocational and Technical Education for Iowa?

I am looking forward to our continued cooperative efforts toward the extension and strengthening of Vocational and Technical Education in Iowa.

Sincerely yours,

Marguerite Scruggs

Marguerite Scruggs
Assistant Dean
College of Home Economics

MS:wn